

Claims

a "We claim:

1. A common rail system for supplying fuel to internal combustion engines, in particular Diesel engines of passenger cars, having a central high-pressure fuel reservoir (4), which via high-pressure fuel lines (5, 7) communicates with a plurality of injectors, whose opening and closing motions are controlled each by a respective control device (13; 17, 19), characterized in that the high-pressure fuel reservoir (4) and the control devices (13; 17, 19) are combined in a module, which communicates permanently with the injectors via high-pressure fuel lines (8, 48).
2. The common rail system of claim 1, characterized in that at least one sensor (24) is integrated with the module (3).
3. The common rail system of one of the foregoing claims, characterized in that the control device includes a first control valve member (13), which is received axially displaceably in the module (3) between an opened position, in which a communication between the high-pressure fuel reservoir (4) and the triggered injector is opened, and a closed position, in which the communication between the high-pressure fuel reservoir (4) and the respective injector is closed, as a function of the pressure in a control chamber (12), and a second axially displaceable control valve member (17, 19), received in the module (3), which opens a communication between the control chamber (12) and a pressureless return (18) as a function of the position of an axially displaceable actuator (22), in particular a piezoelectric actuator, and that the longitudinal axes of the first control valve member (13), the second control valve member (17, 19) and the actuator (22) are each disposed at a right angle to one another.
4. The common rail system of one of the foregoing claims, characterized in that conventional nozzle holder combinations are used as injectors.

5. An internal combustion engine, having a cylinder head (1) and a cylinder head cap (2), characterized in that a module (3) of one of the foregoing claims is mounted between the cylinder head (1) and the cylinder head cap (2).

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